

ANNUAL REPORT
OF THE
Department of Public Works
OF THE
PROVINCE OF ALBERTA
1927-28

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON:
Printed by W. D. McLean, King's Printer
1928

Sessional Paper No. 8.

EDMONTON, MARCH 31, 1928.

To His Honour

WILLIAM EGBERT,

Lieutenant Governor of the Province of Alberta.

Sir:

The undersigned has the honour to submit herewith the Report of the Department of Public Works for the period from January 1st, 1927, to March 31, 1928.

Respectfully submitted,

O. L. MCPHERSON,

Minister of Public Works.

CONTENTS

	Page
Report of Deputy Minister of Public Works.....	7
Main Highways Maintenance	9
Roads and Ferries	11
Annual Report, Main Highways, 1927-28	15
Bridge Engineer's Report	19
Surveys Branch	20
Building Maintenance Branch	21
Power Plants	24
Provincial Gaol, Fort Saskatchewan	27
Provincial Gaol, Lethbridge	32

REPORT

OF THE

DEPUTY MINISTER OF PUBLIC WORKS

EDMONTON, MARCH 31, 1928.

HON. O. L. MCPHERSON,
Minister of Public Works.

SIR.—I have the honour to submit herewith the Report of the Department of Public Works for the year 1927.

The report of the Chief District Engineer submitted herewith contains the mileage and cost of main highways maintained, Capital and Income grants earned by municipal authorities on district highways and local roads, and ferries operated, with the cost of operation and maintenance of each.

The report of the Highway Commissioner submitted herewith contains full details of contracts awarded for the improvement of main highways, the mileage of sub-grade constructed and the mileage surfaced with gravel. Notwithstanding the unfavourable weather conditions of the past working season, your Department has now completed a gravel-surfaced highway from Edmonton south through Calgary to the International boundary, with the exception of approximately 30 miles between Macleod and Cardston, sub-grade of which is now under contract.

The opening of the Peace River highway for traffic was not possible during the past season on account of unfavourable weather conditions, and especially due to the rise of the waters of Lesser Slave Lake, which were approximately six feet higher than normal, and remained at that elevation practically all summer. The general route of the highway decided upon by your Department prior to the commencement of clearing right of way during the winter of 1925 and 1926 followed high ground well above the lake level. The policy decided upon at that time was to open and improve for traffic the sections of highway where no road existed, to make use of the present old trails where they were reasonably passable for traffic, and to postpone for the time being the improvement of other sections of the highway on the permanent route where trails existed that under normal weather conditions would be reasonably passable for traffic. For this reason your Department left for improvement at a later date several sections of the highway, especially where the present trail along the lake shore between Kinuso and High Prairie could be used for the time being. Unfortunately, however, owing to the rise in the waters of Lesser Slave Lake, the old trail along the beach was under water, and the highway could not be made available for traffic until further improvement of the permanent route was undertaken.

I submit herewith the following reports from branches of your Department:

The report of the Bridge Engineer showing the number of bridges constructed and maintained during the year, together with the details of steel bridges constructed.

The report of the Director of Surveys containing detailed work of the Surveys Branch of your department.

The report of the Superintendent of Buildings, with details covering the construction and maintenance of Provincial buildings.

The report of the Superintendent of Power Plants, dealing with the work of his branch of your department.

The report of the Chief Clerk as required by Section 22 of The Public Vehicles Act, 1927.

The report of the Warden of the Provincial Gaol at Fort Saskatchewan.

The report of the Warden of the Provincial Gaol at Lethbridge.

Respectfully submitted,

J. D. ROBERTSON,

Deputy Minister.

**MAIN HIGHWAYS MAINTENANCE—DISTRICT HIGHWAYS AND
LOCAL ROADS—FERRY CONSTRUCTION AND OPERATION**

H. P. Keith, Chief District Engineer

Statement showing the Expenditure from Income during the period
January 1st, 1927, to March 31st, 1928, for the Maintenance of Main
Highways.

Location.	Miles.	Amount Expended 15 months.
Edmonton to Calgary—		
Sec. A. Calgary-Didsbury	44.0	\$ 9,659.87
Sec. B. Didsbury-Millet	113.0	10,951.32
Sec. C. Millet-Edmonton	27.0	4,618.02
Calgary to Banff Park Boundary	49.0	12,373.92
Calgary to Medicine Hat—		
Sec. A. Calgary-E. Bdry. Rge. 16-4	101.0	8,613.70
Sec. B. E. Bdry. Rge. 16-4-Medicine Hat	99.0	3,332.97
Calgary to U.S. Boundary—		
Sec. A. Calgary-Nanton	54.0	14,263.53
Sec. B. Nanton-Carway	110.0	8,137.77
Walsh to Crow's Nest—		
Sec. A. Walsh-Grassy Lake	86.0	2,782.36
Sec. B. Grassy Lake-Crow's Nest	159.0	14,751.82
Lethbridge to Coutts	75.0	6,275.76
Calgary to Bowness Park	3.5	537.77
Hanna to Viking—		
Sec. A. Hanna-Battle River	65.0	3,663.80
Sec. B. Battle River-Viking	53.0	2,828.66
Calgary to Alsask—		
Sec. A. Inverlake-Drumheller	70.0	5,508.01
Sec. B. Drumheller-Alsask	155.0	8,029.75
Lacombe to Compeer—		
Sec. A. Lacombe-Halkirk	76.0	6,653.24
Sec. B. Halkirk-Coronation	41.0	2,839.53
Sec. C. Coronation-Compeer	76.0	2,383.74
Wetaskiwin to Hayter—		
Sec. A. Wetaskiwin-Bittern Lake	17.0	877.58
Sec. B. Bittern Lake-Hayter	169.0	13,499.33
Edmonton to Butze—		
Sec. A. Edmonton-Wainwright	147.0	8,732.86
Sec. B. Wainwright-Butze	48.0	1,225.70
Edmonton to Lloydminster—		
Sec. A. Edmonton-Chipman	44.0	2,980.04
Sec. B. Chipman-E. Bdy. Rge. 13	51.0	3,660.91
Sec. C. E. Bdy. Rge. 13-Lloydminster	91.0	3,916.23
Edmonton to Edson	140.0	8,000.61
Edmonton to Athabasca	90.0	7,447.33
Edmonton to N.E. 24-53-19-4	39.0	2,354.29
Grande Prairie to Pouce Coupe	65.0	4,543.32
Athabasca to Peace River—		
Sec. A. Athabasca-N. Bdy. Tp. 68	30.0	330.70
Sec. B. N. Bdy. Tp. 68-Peace River	210.0	2,911.65
Red Deer to Rocky Mountain House	50.0	4,378.59
Peace River to Grande Prairie—		
Sec. A. Peace River-6th Meridian	40.0	1,776.42
Sec. B. 6th Meridian-Grande Prairie	96.0	6,337.55
Drumheller to Rosedale	4.3	880.58
Total.....	2,787.8	\$202,059.23

THE MAINTENANCE OF THE FOLLOWING ROADS

During the period January 1st, 1927, to March 31st, 1928, although not included in the Main Highway System, was paid for under the authority of Section 30, Public Highways Act, out of monies voted from Income for the maintenance of main highways.

Location.	Amount Expended 15 months.
Cardston to Waterton Lakes Park	\$ 2,085.39
Pincher Creek-Waterton Lakes Park	1,860.00
Lacombe to Gull Lake	269.50
St. Albert to Alberta Beach	2,002.47
W. of Clyde to Fort Assiniboine	4,305.12
E. and S. of New Norway	28.80
Okotoks to Turner Valley	123.30
Total.....	<u>\$ 10,674.58</u>

Summary

Maintenance of Main Highways	\$202,059.23
Maintenance of Additional Roads	10,674.58
General:	
Administration and supervision	14,284.49
Machinery and equipment	18,319.73
Sundries	1,620.71
Total Expenditure.....	<u>\$246,958.74</u>

ROADS AND FERRIES

The total number of ferries operated by the Department during the period January 1st, 1927, to March 31st, 1928, was 54. There were two ferries located at points where the traffic was so light that it did not warrant the employment of an operator. These ferries were maintained by the Department so that the people could operate them for their own convenience. These were as follows:

Ferry over Pembina River at Antonsen Crossing,

Ferry over Narrows of Sandy Lake,

making 56 Government-owned ferries in the Province.

The ferry over the North Saskatchewan River at the 4th Meridian, north of Lloydminster, was operated by the Saskatchewan Government. This Department paid 50% of the cost of operation.

New scows were built in connection with the following ferries:

North Saskatchewan River at Elderena.

McLeod River at Allendale Crossing.

McLeod River at Mahaska Crossing.

Pembina River west of Fawcett.

Peace River at Fort Vermilion.

The expenditure for roads under Votes 707-B and 771-B was controlled by allotments to Improvement Districts and grants to Municipal Districts.

Expenditures controlled by this Department Branch during the period January 1st, 1927, to March 31st, 1928, were as follows:

	15 months.
Ferries Maintenance	\$ 58,243.32
Ferries Construction	18,385.41
District Highways	364,880.53
Local Roads	235,653.97
Main Highways Maintenance	246,958.74
Total.....	<u>\$924,121.97</u>

STATEMENT SHOWING THE AMOUNT OF ROAD GRANTS EARNED
BY EACH MUNICIPAL AND IMPROVEMENT DISTRICT,
JANUARY 1st, 1927, TO MARCH 31st, 1928.

M.D. or I.D. No.	Revenue.	Capital.	M.D. or I.D. No.	Revenue.	Capital.
I.D. 1.....	\$ 409.50	\$ 253.00	M.D. 65.....	\$ 300.00	\$ 902.00
I.D. 2.....	.....	616.00	I.D. 66.....	443.70	323.00
I.D. 3.....	421.05	.....	I.D. 67.....	521.22	250.06
I.D. 4.....	369.37	689.65	I.D. 68.....	599.50	567.00
I.D. 5.....	.....	437.12	M.D. 69.....	530.00	.....
I.D. 6.....	799.70	430.50	M.D. 70.....	460.00	150.00
I.D. 7.....	446.50	1,088.20	I.D. 71.....	93.60	.....
I.D. 8.....	441.65	1,040.15	I.D. 91.....	536.48	945.05
I.D. 9.....	498.90	84.50	M.D. 92.....	.....	448.87
M.D. 10.....	300.00	500.00	I.D. 93.....	322.25	.....
I.D. 31.....	294.69	.....	M.D. 96.....	300.00	187.00
I.D. 32.....	117.20	123.65	I.D. 97.....	744.25	670.69
M.D. 33.....	.....	110.25	M.D. 98.....	700.00	1,898.00
M.D. 34.....	63.50	1,252.75	M.D. 99.....	800.00	851.00
I.D. 35.....	495.00	722.70	I.D. 100.....	895.95	752.50
M.D. 36.....	472.45	1,044.35	I.D. 101.....	.....	.....
M.D. 37.....	650.00	800.00	I.D. 121.....	97.50	625.45
I.D. 38.....	599.50	985.25	I.D. 122.....	517.25	.....
M.D. 39.....	529.00	1,030.00	I.D. 125.....	.....	646.50
M.D. 40.....	310.00	120.00	I.D. 126.....	326.00	734.65
I.D. 61.....	465.97	1,198.08	M.D. 127.....	500.00	967.50
I.D. 62.....	526.00	709.86	M.D. 128.....	650.00	1,215.00
I.D. 63.....	.....	675.00	M.D. 129.....	1,000.00	858.00
M.D. 64.....	30.00	58.25	I.D. 130.....	574.55	569.80

DEPARTMENT OF PUBLIC WORKS

M.D. or I.D. No.	Revenue.	Capital.	M.D. or I.D. No.	Revenue.	Capital.
I.D. 151.....		\$ 365.95	M.D. 395.....	\$ 815.00	\$ 1,270.00
I.D. 152.....	\$ 503.00		M.D. 396.....	700.00	1,800.00
M.D. 153.....	158.50	524.00	M.D. 397.....	696.00	1,394.00
I.D. 155.....	628.63		M.D. 398.....	992.60	1,815.00
I.D. 156.....	504.84	1,235.54	M.D. 399.....	1,220.80	1,260.00
M.D. 157.....	775.00	500.00	M.D. 400.....	813.00	1,254.00
M.D. 158.....	800.00	1,431.00	M.D. 401.....	1,196.30	1,584.00
M.D. 159.....	800.00	820.50	I.D. 403.....	672.10	899.55
I.D. 160.....	390.91	351.00	M.D. 421.....	700.00	625.00
I.D. 181.....	355.00	242.60	M.D. 422.....	800.00	1,200.00
I.D. 182.....	569.50	334.90	M.D. 423.....	649.00	812.00
M.D. 183.....		164.25	M.D. 424.....	520.00	750.00
I.D. 185.....	615.00	730.75	M.D. 425.....	953.00	288.00
I.D. 186.....	399.00	340.00	M.D. 426.....	700.00	1,700.00
M.D. 189.....	900.00	1,890.00	M.D. 427.....	949.00	1,908.00
M.D. 190.....	750.00	400.00	M.D. 428.....	574.00	1,225.00
M.D. 191.....	624.86		M.D. 429.....	952.00	1,428.00
I.D. 211.....	404.95	611.81	M.D. 430.....	893.20	1,332.00
I.D. 212.....	419.62	681.49	M.D. 431.....	847.00	756.00
I.D. 213.....	442.28	316.62	M.D. 451.....	800.00	1,710.00
M.D. 214.....	565.00	553.00	M.D. 452.....	748.30	918.00
M.D. 215.....	406.00	889.00	M.D. 453.....	812.00	1,360.00
I.D. 216.....	378.30	701.90	M.D. 454.....	739.00	831.00
I.D. 217.....	492.50	850.00	M.D. 455.....	839.00	706.35
M.D. 218.....	650.00	1,058.00	M.D. 456.....	589.00	2,000.00
M.D. 219.....	650.00	1,225.00	M.D. 457.....	644.00	1,131.00
M.D. 220.....	665.70	568.80	M.D. 458.....	1,323.70	1,728.00
M.D. 221.....	437.50	1,352.00	M.D. 459.....	799.60	2,268.00
I.D. 222.....	500.00	216.00	M.D. 460.....	687.40	2,160.00
M.D. 241.....	416.00	544.00	I.D. 461.....	823.27	619.63
M.D. 242.....	606.90	882.00	I.D. 462.....	198.10	
M.D. 243.....		525.00	M.D. 481.....	874.30	1,188.00
M.D. 244.....	82.50	475.00	M.D. 482.....	865.20	1,353.00
M.D. 245.....	571.90	779.00	M.D. 483.....	844.52	1,149.25
I.D. 246.....	296.15	160.00	M.D. 484.....	882.00	1,218.00
I.D. 247.....	549.75	1,026.82	M.D. 485.....	681.00	1,716.00
M.D. 248.....	650.00	1,404.00	M.D. 486.....	1,000.00	825.00
M.D. 249.....	562.50		M.D. 487.....	1,120.00	1,200.00
M.D. 250.....	850.00	690.00	M.D. 488.....	924.00	1,496.00
I.D. 251.....	488.00	682.00	M.D. 489.....	1,180.00	1,716.00
I.D. 252.....	400.50	210.00	M.D. 490.....	805.00	2,448.00
M.D. 271.....	571.90	924.00	I.D. 491.....	582.85	1,334.24
M.D. 272.....	571.90	1,242.00	M.D. 511.....	1,022.00	2,519.15
M.D. 273.....	543.00	638.00	M.D. 512.....	809.50	2,101.00
M.D. 274.....	536.90	819.00	M.D. 513.....	865.95	1,510.97
M.D. 275.....	650.30	1,265.00	M.D. 514.....	925.40	1,904.00
M.D. 277.....	767.90	1,012.00	M.D. 515.....	1,022.00	1,488.00
M.D. 278.....		1,440.00	M.D. 516.....	1,121.00	625.00
M.D. 279.....	750.00	1,326.00	M.D. 517.....	826.00	1,276.00
M.D. 280.....	875.00	1,008.00	M.D. 518.....	861.00	624.00
M.D. 281.....	700.00	1,404.00	M.D. 519.....	1,029.70	2,156.00
I.D. 282.....	665.32	359.46	M.D. 520.....	984.00	1,860.00
M.D. 301.....	576.10	644.00	M.D. 521.....	670.00	1,200.00
M.D. 302.....	543.90	1,518.00	M.D. 522.....	735.00	1,104.00
M.D. 303.....	557.90	764.00	I.D. 525.....	464.48	
M.D. 304.....	485.00	782.00	I.D. 541.....	474.57	1,350.18
M.D. 305.....	606.20	880.00	M.D. 542.....	543.10	1,491.50
M.D. 306.....	679.00	1,012.00	M.D. 543.....	1,152.20	1,731.00
M.D. 307.....	630.00	1,058.00	M.D. 544.....	644.00	1,496.00
M.D. 308.....	865.00	2,160.00	M.D. 545.....	1,089.90	1,700.00
M.D. 309.....	769.30	1,692.00	M.D. 546.....	1,005.25	1,171.50
M.D. 310.....	928.90	1,056.00	M.D. 547.....	1,018.00	1,434.00
M.D. 311.....	830.20	1,476.00	M.D. 548.....	744.00	3,750.00
M.D. 312.....	1,294.00	900.00	M.D. 549.....	983.00	2,234.50
I.D. 331.....	587.54	1,436.08	M.D. 550.....	1,138.00	2,824.00
I.D. 332.....	652.00	1,192.80	M.D. 551.....	1,377.00	4,050.00
I.D. 333.....	687.75	1,288.20	M.D. 552.....	687.00	870.00
M.D. 334.....	1,024.10	1,628.00	I.D. 553.....	929.61	1,367.80
M.D. 335.....	410.20	380.00	I.D. 554.....	1,204.58	1,006.25
M.D. 336.....	596.50	1,944.00	I.D. 555.....	3,214.50	973.45
M.D. 337.....	1,102.10	972.00	I.D. 571.....		597.70
M.D. 338.....	269.60	2,700.00	M.D. 572.....	690.90	1,428.00
M.D. 339.....	1,028.10	2,088.00	M.D. 573.....	1,024.10	1,802.00
M.D. 340.....	808.00	1,564.00	M.D. 574.....	591.40	790.50
M.D. 341.....	805.00	1,435.00	M.D. 575.....	1,080.62	1,378.85
M.D. 342.....	803.60	1,512.00	M.D. 576.....	1,218.00	918.00
M.D. 343.....	1,014.30	1,188.00	M.D. 577.....	965.25	1,836.00
M.D. 361.....	396.00	1,474.00	M.D. 578.....	829.00	2,258.05
M.D. 362.....	725.00	900.00	M.D. 579.....	632.00	3,087.00
M.D. 363.....	762.00	890.00	M.D. 580.....	583.00	2,953.88
M.D. 364.....	1,000.00	1,896.00	M.D. 581.....	1,129.00	1,776.00
M.D. 365.....	891.90	378.00	M.D. 582.....	1,570.00	3,200.00
M.D. 366.....	598.50	1,728.00	I.D. 583.....	1,982.25	2,016.00
M.D. 367.....	810.00	1,551.00	I.D. 584.....		1,749.70
M.D. 371.....	1,478.50	612.00	I.D. 601.....	742.50	1,148.50
M.D. 391.....	814.00	1,054.00	I.D. 602.....	918.40	1,192.74
M.D. 392.....	622.00	1,394.00	I.D. 603.....	846.40	534.50
M.D. 393.....	760.00	460.00	I.D. 604.....	1,011.20	1,451.05
M.D. 394.....	594.00	884.00	M.D. 605.....	651.70	1,348.77

ANNUAL REPORT, 1927-28

13

M.D. or I.D. No.	Revenue.	Capital.	M.D. or I.D. No.	Revenue.	Capital.
I.D. 607.....	\$ 855.60	\$ 1,121.05	M.D. 740.....	\$ 876.90	\$ 1,043.70
M.D. 608.....	1,489.00	656.00	I.D. 741.....	1,427.83	2,400.00
M.D. 609.....	1,161.00	2,116.00	I.D. 742.....	355.90	403.79
I.D. 610.....	1,100.86	2,583.29	I.D. 764.....	1,633.07	832.88
I.D. 611.....	523.63	888.56	I.D. 765.....	1,432.60	.....
I.D. 612.....	509.74	430.73	I.D. 766.....	.....	493.85
I.D. 615.....	.....	639.76	I.D. 769.....	428.57	539.75
I.D. 631.....	288.50	571.05	I.D. 770.....	703.19	530.65
I.D. 634.....	446.67	.....	I.D. 771.....	1,181.25	1,898.15
I.D. 635.....	688.79	1,567.30	I.D. 772.....	775.05	907.72
I.D. 636.....	242.60	134.50	I.D. 794.....	296.37	379.25
M.D. 637.....	558.93	537.08	I.D. 796.....	1,952.44	3,297.58
M.D. 638.....	2,668.00	1,206.90	I.D. 797.....	249.00	360.40
I.D. 639.....	718.20	1,098.38	I.D. 800.....	300.00	120.00
I.D. 640.....	763.60	1,095.98	I.D. 825.....	75.50	1,142.27
I.D. 641.....	1,203.05	605.60	I.D. 826.....	1,361.30	406.00
I.D. 665.....	1,127.25	1,563.00	I.D. 828.....	652.30	1,653.00
I.D. 666.....	834.75	540.55	M.D. 829.....	934.00	1,136.00
I.D. 667.....	1,278.02	1,772.90	I.D. 830.....	20.00	380.00
M.D. 668.....	1,000.00	372.00	I.D. 831.....	188.75	418.75
I.D. 669.....	191.00	.....	I.D. 843.....	300.00	.....
I.D. 695.....	417.05	.....	I.D. 855.....	.....	770.80
I.D. 697.....	593.30	.....	M.D. 857.....	1,115.00	1,400.00
I.D. 699.....	183.40	.....	M.D. 858.....	1,272.00	1,935.00
I.D. 706.....	122.00	.....	I.D. 886.....	788.20	1,541.86
I.D. 707.....	589.90	.....	I.D. 887.....	958.45	2,658.60
I.D. 709.....	169.00	.....	I.D. 916.....	3.40	.....
I.D. 729.....	384.75	.....	I.D. 917.....	337.57	.....
I.D. 732.....	493.44	807.40	I.D. 946.....	245.15	.....
I.D. 735.....	9.90	.....	I.D. 1065.....	149.50	.....
I.D. 737.....	489.95	.....	I.D. 1094.....	178.70	.....
I.D. 738.....	645.80	722.75	I.D. 1124.....	331.00	.....
M.D. 739.....	1,260.00	3,828.63	I.D. 1125.....	86.50	.....

SPECIAL APPROPRIATIONS:

Indian Reserves	\$ 2,308.71	\$ 6,076.44
In 29-66-22-4	784.44	.....
South 1-48-4-5	400.00	.....
Wabasca Lake Trail	500.00	.....
Whitefish Lake Trail	494.85	.....
Bet. Onoway and Whitecourt	1,206.42	.....
Fort Fitzgerald to Fort Smith	301.50	600.00
N. 1/6-58-10-4—N. 1/3-58-11-4	500.00	.....
S. 14, 15, 16-62-1-5	211.40	.....
Niton to Hattenford	1,500.00	.....
East 17/20-59-3-5	485.77	.....
North 19-59-3-5	125.00	.....
East 8, 17 and 20-58-4-5	200.00	.....
Edson East	172.00	.....
E. 35-33-1-5	100.00	.....
Okotoks to Black Diamond .....	.....	3,487.92
West from Hoadley .....	.....	1,000.00
St. Paul to Cold Lake .....	.....	4,998.09
Onoway to Whitecourt .....	.....	12,006.00
Bet. Battle River Prairie-Whitemud River .....	.....	1,482.66
Bet. Gleichen-Arrowwood .....	.....	3,446.41
St. Albert to Alberta Beach .....	.....	758.84
North 19-49-5-5, S. & W. 25-49-6-5 .....	.....	1,600.00
South of Entwistle Bet. 27/28-52-7-5 .....	.....	995.95
S. side of N. Sask. River leading to Pakan Ferry .....	.....	297.95
Leading to Ferry over N. Saskatchewan at Waskatenau .....	.....	2,543.15
East 20 and 29-59-2-5 .....	.....	391.87
Sunnibend West through Tp. 61-1-5 .....	.....	499.20
Barrhead West .....	.....	300.00
Jarvie North .....	.....	500.00
Macleod to Hillspring and South .....	.....	3,101.62
Hillspring E. through Blood Indian Reserve .....	.....	1,086.23
East of Carbon .....	.....	2,000.00
Barrhead to Fort Assiniboine .....	.....	676.75
N. 12-20-3-5 leading to District Highway .....	.....	1,050.30
W. Spirit River .....	.....	311.16
Roads, General	29,505.28	21,304.22

\$235,653.97 \$364,880.53

DEPARTMENT OF PUBLIC WORKS

FERRIES MAINTENANCE

January 1st, 1927, to March 31st, 1928

Location.	Operation.	Maintenance.	Total.
N. Saskatchewan River at Brosseau.....	\$ 608.00	\$ 214.57	\$ 822.57
N. Saskatchewan River at Desjarlais	422.50	1,567.47	1,989.97
Athabasca River at Holmes Crossing	597.33	264.42	861.75
Red Deer River at Dorothy	621.33	118.05	739.38
N. Saskatchewan River at Pakan	455.00	321.15	776.15
Red Deer River at Garrington Crossing.....	640.00	404.49	1,044.49
N. Sask. River 4th Meridian (50% cost of operation)..	1,252.31	.....	1,252.31
Athabasca River at Athabasca	500.76	403.67	904.43
Pembina River at Lett's Crossing	485.00	168.96	653.96
N. Sask. River at Shandro	452.83	362.85	815.68
N. Sask. River at Hopkins	517.50	218.76	736.26
Red Deer River at Hutton	640.00	725.51	1,365.51
N. Sask. River at Rocky Mountain House.....	609.00	152.45	761.45
Narrows of Lac Ste. Anne	396.00	226.61	622.61
N. Sask. River at Lea Park	520.00	242.90	762.90
N. Sask. River at Eldorena	448.00	113.15	561.15
Pembina River at Wright's Crossing	448.00	267.30	715.30
N. Sask. River at Lamara's Crossing	441.00	185.36	626.36
Peace River at Dunvegan	708.00	1,046.06	1,754.06
S. Sask. River at Bow Island	572.29	179.82	752.11
N. Sask. River N. of Manville	453.57	115.12	568.69
N. Sask. River at Genesee	427.29	110.85	538.14
Red Deer River at Steveville	592.00	151.24	743.24
Big Smoky River at Goodwin's Crossing	646.00	185.96	831.96
Bow River at Riverbow	592.00	1,092.85	1,684.85
Bow River at Bredin Crossing	647.74	516.57	1,164.31
Red Deer River W. of Munson	458.21	105.21	563.42
N. Sask. River at Berrymoor	537.50	247.13	784.63
Red Deer River at Finnekan Crossing	640.00	893.43	1,533.43
Pembina River at Mathews Crossing	422.00	157.98	579.98
N. Sask. River at Mooswa	522.50	100.93	623.43
McLeod River at Allendale Crossing	428.00	76.57	504.57
N. Sask. River at Vinca	450.67	168.76	619.43
Pembina River at Manola .....	.....	58.06	58.06
McLeod River at McLeod Valley	562.33	376.06	938.39
Red Deer River N. of Jenner	640.00	246.04	886.04
Red Deer River at Gregory Crossing	668.39	215.51	883.90
N. Sask. River at Elk Point	576.00	328.08	904.08
Narrows, Sandy Lake .....	.....	149.54	149.54
Red Deer River West of Morrin	577.58	141.28	718.86
Athabasca River at Smith	681.34	141.37	822.71
Bow River S. of Crowfoot	533.34	564.80	1,098.14
Pembina River S. of Fawcett	452.83	152.90	605.73
N. Sask. River at Waskatenau	507.50	179.20	686.70
Athabasca River at N. of Blue Ridge	529.67	488.14	1,017.81
McLeod River at Mahaska	452.65	138.72	591.37
Red Deer River N. of Altce	683.86	749.89	1,433.75
N. Sask. River at Forbesville	459.66	122.53	582.19
S. Sask. River S. of Empress	626.67	2,104.24	2,730.91
McLeod River at Rosevear	504.91	229.37	734.28
N. Sask. River at Warspite	465.67	183.74	649.41
Red Deer River at Buffalo Crossing	629.33	801.12	1,430.45
Over Pembina River, W. Fawcett .....	.....	24.93	24.93
Peace River at Ft. Vermilion	661.53	782.95	1,444.48
N. Sask. River at Heinsburg	462.00	96.80	558.80
Red Deer River at Rosedale	631.31	497.58	1,128.89
Athabasca River at Whitecourt	487.67	206.43	694.10
Bow River at Bow Slope Crossing	605.33	679.93	1,285.26
Ferries, General .....	.....	6,926.06	6,926.06
Total Expenditure.....	\$30,551.90	\$27,691.42	\$58,243.32

FERRIES CONSTRUCTION

January 1st, 1927, to March 31st, 1928

Location.	Amount.
North Saskatchewan River at Eldorena	\$ 1,323.27
McLeod River at Allendale Crossing	1,570.73
McLeod River at Mahaska	1,115.97
Over Peace River at Fort Vermilion	1,573.41
Over Pembina River West of Fawcett	1,924.94
Ferries, General	1,006.97
N. Saskatchewan River at Brosseau	2,346.84
Athabasca River at Athabasca	986.98
N. Saskatchewan River at Genesee	515.39
Red Deer River W. Munson	636.22
Red Deer River N. Jenner	597.48
Pembina River S. Fawcett	1,293.28
N. Saskatchewan River at Waskatenau	1,680.87
S. Saskatchewan River S. Empress.....	1,780.56
Big Smoky River at Goodwin's Crossing.....	32.50
Total Expenditure	\$18,385.41

MAIN HIGHWAYS

(C. A. DAVIDSON, *Highway Commissioner*)

From January 1st, 1927, to March 31, 1928, a total expenditure of \$1,048,367.01 was made under Capital Vote 754, of which \$806,105.27 was submitted for audit to the Department of Railways and Canals, Ottawa, as work under agreement with the Dominion Government (Canada Highways Act, 1919, expiring March 31, 1928).

The inclusion of this amount in the final statement for Dominion Audit produces a grand total of \$3,904,109.68 of expenditure on main highway construction projects, from which is to be selected \$3,694,525.00 of approved expenditure necessary to retire the Dominion subsidy available to the Province in the amount of \$1,477,810.00, being 40% of construction costs on work approved. There is therefore every assurance that with the expiration of The Canada Highways Act, the Province will have earned the entire amount available.

Twenty-three contracts were awarded in the construction season, the Department in the main concentrating on the completion of a gravelled highway between Calgary and Edmonton and continuing with the grading and gravelling of the main highway between Calgary and the International Boundary. Owing to delays occasioned by unfavourable working conditions, winter gravelling on several sections south of Calgary was undertaken.

Details of contracts awarded are as follows:

STANDARD EARTH GRADE

Project.	Location.	Miles.	% Comp.	Contractor.
1-E-1—Ponoka North		0.4	100	C. S. Wing—Revised bdy. of Ponoka.
1-F-1—Leduc North		0.3	100	Town of Leduc—Revised bdy. of Leduc.
2-C-1—Lethbridge-Chin		19.3	100	F. Mannix.
2-E-8—West Coleman		0.3	100	W. A. Foreman & Co.
3-B-2—Stavely-Granum		23.3	100	Commercial Cartage Co.
3-C-1—Cardston-Stand-off		23.0	66	Russell & McLeod.
3-C-2—Stand-off-MacLeod		15.6	48	W. A. Foreman & Co.
5-B-2—Drumheller-Munson		6.9	83	F. Mannix.
9-A-1—Alhambra-West		2.4	100	A. Webster & Son.
15-A-2—Edmonton-Legal		21.8	100	Western Construction Co.
21-A-2—Calgary-Bowness		1.6	100	A. G. Foster—Extension to Park.
23-A —Cardston-Waterton		24.8	87	Commercial Cartage Co.

139.7 miles.

SURFACING

Project.	Location.	Miles.	% Comp.	Type.	Contractor.
1-A-2—Airdrie-Carstairs		21.5	100	1G	Commercial Cartage Co.
1-B-2—Carstairs-Olds		16.6	100	2G	Commercial Cartage Co.
1-B-3—3 M E Olds-4 M S Innisfail		13.5	100	1G	Commercial Cartage Co.
1-C-2—5 M S Red Deer-Red Deer		5.0	100	1G	Commercial Cartage Co.
1-C-2—7 M N Innisfail-5 M S Red Deer		6.9	100	1G	Penn Delivery Co.
1-D-1—Lacombe-3 M North		3.0	100	2G	Penn Delivery Co.
1-D-2—Red Deer-Lacombe		13.5	100	1G	Penn Delivery Co.
1-D-3—3 M N Lacombe-Ponoka		14.2	100	2G	Penn Delivery Co.
1-F-1—Leduc-North		0.3	100	1G	John R. Elder.
3-A-4—Nanton-Stavely		17.0	72	1G	McCoy & McCann.
3-B-1—Granum-MacLeod		12.9	100	1G	McCoy & McCann.
3-B-2—Stavely-Granum		23.3	100	1G	McCoy & McCann.
3-C-1—Cardston-North		9.15	100	1G	Commercial Cartage Co.
6-A-1—6 M N Warner-New Dayton		7.0	100	1G	McLaughlin & Carlson.
21-A-2—Calgary-Bowness Extension		1.6	100	1G	A. G. Foster.
23-A —Cardston-Waterton		24.8	75	1G	Commercial Cartage Co.
15-B-2—North of Rochester		2.04	100	C	H. C. Macdonald.

192.29 miles.

1G: 1st Gravel Course

2G: 2nd Gravel Course.

C: Sand-clay.

DEPARTMENT OF PUBLIC WORKS

GUARD RAIL

Project.	Location.	Lin.	Ft.	%	Comp.	Contractor.
1 A-D—	Calgary-Ponoka	18,576	73			Neil McFadyen.

In addition to the foregoing, the following gravel surfacing contracts, awarded in 1926, were completed in 1927:

Project.	Location.	Miles Completed 1927.	Contractor.
1-D-1-3—	Lacombe-Ponoka	7.1	Commercial Cartage Co.
1-E-2-3—	Menaik-Millet	15.8	A. Webster & Son.
1-F-1 —	Edmonton-Leduc	5.1	G. B. Wood Co.
1-F-2 —	Millet-Leduc	7.1	Commercial Cartage Co.
6A1-B1-3—	Warner-U.S.A. Bdry.	5.6	J. A. Broley.

40.7 miles.

There were several extensions to the highway system of the Province in the past year, these being as follows:

Extension of highway from Rosedale to Wayne providing connection with gravelled road from Drumheller	3.8 miles
Extension of Calgary-Bowness road from Canadian Pacific grade crossing to entrance to Bowness Park.....	1.6 miles
Extension of Calgary-Edmonton main highway by withdrawal from incorporated boundary of Leduc	0.3 miles
Extension of Calgary-Edmonton main highway by withdrawal from incorporated boundary of Ponoka	0.4 miles
Inclusion of highway from Cardston to the East boundary of Waterton Lakes National Park	24.8 miles

Field engineering parties were engaged throughout the winter obtaining preliminary data on main highway locations at the following points:

Fort Saskatchewan-Lamont, Mundare-Vegreville, Innisfree-Vermilion, Camrose-Wetaskiwin, Macleod-Lethbridge, in addition to which reconnaissance surveys were undertaken in the Lesser Slave Lake section of the Peace River Highway.

The Department having compiled its final statement to the Dominion Auditor on all work under agreement, I append a summary of general information on the extent and costs of all work under the Canada Highways Act from the commencement of our work in 1924 up to and including March 31, 1928.

TOTAL MILEAGE CONSTRUCTED

Standard Earth Grade	1139.45 miles
1st Course Gravelling	504.53 “
2nd Course Gravelling	322.76 “
Sand Clay Surfacing	26.41 “
Clay Shale Surfacing	11.50 “
Mine Earth Surfacing	3.90 “

CONSTRUCTION EXPENDITURE BY PROJECTS, 1924-1928

Calgary-Edmonton Highway	\$1,062,967.80
Walsh-Crow's Nest Highway	434,312.84
Calgary-International Boundary	594,208.55
Calgary-Medicine Hat	194,179.31
Calgary-Alsask	130,430.81
Lethbridge-Coutts	218,743.24
Calgary-Kananaskis	219,819.16
Hanna-Viking	35,210.22
Red Deer-Rocky Mountain House	73,046.00
Lacombe-Coronation	83,840.50
Edmonton-Wainwright	65,896.64
Edmonton-Lloydminster	254,801.40
Edmonton-Entwistle	67,497.84
Edmonton-Athabasca	302,779.98
Calgary-Bowness	26,640.01
Drumheller-Wayne	31,950.29
Cardston-Waterton Park	107,785.09
Grand Total.....	<u>\$3,904,109.68</u>

GRAND SUMMARY OF QUANTITIES WITH AVERAGE OF CONTRACT PRICES OF CONSTRUCTION, 1924-1928.

Unit of Bid	Quantity.	Av. Price.
Clearing and close cutting	893.25 ac.	\$22.77
Stumping and grubbing	514.53 ac.	35.36
Common excavation	5,029,707 cu. yds.	.2123
Loose rock	407,007 cu. yds.	.5059
Solid rock	68,059 cu. yds.	1.485
Overhaul	791,054 sta. yds.	.047
Rip-rap and paving	4,968 cu. yds.	2.17
Concrete retaining wall	1448.5 cu. yds.	14.50

Drainage Structures

Corrugated iron pipe	57,988 lin. ft.	2.39
Installation C.I.P.	57,988 lin. ft.	.235
Treated timber culverts	2,330,732 F.B.M.	82.44
Haul and installation T.T.C.	Per M	15.95
Untreated timber culverts	102,857 F.B.M.	42.62
Haul and installation U.T.C.	Per M	27.38

Surfacing Material

Gravel	588,675 cu. yds.	2.45
Sand-Clay	36,097 cu. yds.	1.315
Shale	11,992 cu. yds.	1.40

PERCENTAGE DETAIL ON GRAND SUMMARY OF EXPENDITURE UNDER THE CANADA HIGHWAYS ACT

Unit.	Percentage.	Unit.	Percentage.
Engineering	7.59	Surfacing	39.12
Clearing and grubbing	1.03	Fencing	.01
Grading	38.13	Moving Poles	.31
Drainage structures	12.43	Guard Rail	1.38

The work of the Branch has been increased by the general acceptance of the scheme for improvement of streets within towns and villages affected by our main highway locations, and an engineer has been assigned to this work. Many applications for engineering assistance and supervision have been made and will be dealt with during the forthcoming construction season.

SUMMARY OF CAPITAL EXPENDITURE OF ROAD CONSTRUCTION,
JANUARY 1, 1927, TO MARCH 31, 1928.

Preliminary Engineering on Main Highways	\$	25,970.38
Construction under Canada Highways Act		806,105.27
Not for Dominion Aid, Advertising, etc.		27,516.27
Not under agreement with Dominion Government:		
Pincher Creek-Waterton Lake	\$	1,168.40
Okotoks-Turner Valley		5,567.91
3 Mi. N. Crossfield		1,768.82
Ponoka-Lacombe		1,442.75
Brooks-Duchess		2,055.50
4 Mi. N. Okotoks		3,968.90
Hanna-Castor		1,468.22
Paint Earth-Battle River		497.72
Drumheller-Newcastle		126.45
Drumheller-Alsask		1,697.17
Lacombe-Halkirk		1,493.82
Nevis-Castor		1,343.70
Bittern Lake-Daysland		6,000.00
E. of Provost		1,218.35
E. of Metiskow		4,029.85
E. of Ft. Saskatchewan		1,320.41
Evansburg-Seba		5,548.30
Evansburg-Edson		16,651.48
Edmonton-St. Albert		168.68
Fulton Ravine		4,941.99
Athabasca-McLennan		44,050.20
West of Peace River		2,347.31
Dunvegan-Waterhole		5,000.00
Village of Red Deer		4,761.11
		118,637.04
General:		
Administration	\$	32,657.86
Good Roads Board		711.69
Machinery and equipment		1,309.65
Stock on hand		25,103.67
Gravel Pits		10,355.18
		70,138.05
		\$1,048,367.01

BRIDGES CONSTRUCTION AND MAINTENANCE

JAN. 1st, 1927, TO MARCH 31st, 1928.

(N. W. McPHERSON, *Bridge Engineer*)

During the season fourteen crews were employed on bridge work, eleven on timber bridges, two on steel and one on maintenance. All work, with the exception of twelve timber spans, was completed, and all small crews laid off early in November.

Treated timber was used on all bridges, except those in the northern part of the Province.

The following is a list of steel bridges constructed during the year:

2—100' spans	Elbow River	4/5-24-2-5.
1—175' and 1—200'	Macleod River	20-53-16-4.
1—135' span	E. Prairie River	14-74-16-5.
1—40' "	Berry Creek	9/16-29-11-4.
1—40' "	Parlby Creek	2-40-23-4.
1—80' "	Medicine River	23/26-41-4-5.
1—80' "	Blindman River	20/29-39-28-4.
1—60' "	Strawberry Creek	E. 29-49-2-5.
1—70' "	Whitemud Creek	10-51-25-4.
1—70' "	Blackmud Creek	7/18-51-24-4.
1—60' "	Whitemud Creek	32/33-50-25-4.
1—100' "	Mosquito Creek	15-16-28-4.
1—80' "	Fish Creek	23/26-22-3-5.
1—80' "	Blindman River	N. 31-43-2-5.
1—60' "	Lobstick River	26-39-5-5.
1—60' "	Last Hill Creek	27/28-39-4-5.
2—125' "	Beaver River	25-62-6-4.
1—125' "	Paddle River	20/21-39-3-5.
1—60' "	Dog Pound Creek	21/28-32-3-5.
1—80' "	Paddle River	W. 30-57-7-5.
1—125' "	Belly River	12-3-28-4.
1—60' "	Paddle River	28/29-57-8-5.
1—60' "	Battle River	N. 16-44-27-4.
1—50' "	Knee Hill Creek	S. 4-33-26-4.
1—125' "	Battle River	N. 31-45-22-4.
1—80' "	Nelson Creek	N. 21-38-11-4.
1—80' "	Knee Hill Creek	14/15-29-24-4.
1—60' "	Sturgeon River	10-55-24-4.
1—125' "	Battle River	1/12-45-1-4.
1—125' and 2—135'	Pembina River	16-59-2-5.
1—175' span	Belly River	16-6-25-4.
1—200' "	Waterton River.	
1—125' "	Driftpile River	17-73-12-5.
1—150' "	Red Willow River	23/24-70-16-5.
1—125' "	Blindman River	N. 19-42-2-5.
1—80' "	Nose Creek	5-27-1-5.
1—80' "	Battle River	25-45-23-4.

During the season the following bridges were dealt with:

Construction	398
Maintenance	205
	603

SURVEYS BRANCH

(P. N. JOHNSON, *Director of Surveys*)

During the season of 1927 field work has been kept well in hand by the appointment of an additional Surveyor to the staff, who was assigned to the Medicine Hat District, where there was a considerable accumulation of work.

As in 1926 particular attention has been paid to the survey of Main Highways following final location of revised routes. This season the Southern roads called for attention, including portions of the Crow's Nest Road.

It is to be noted that this year we are carrying forward fewer surveys to next year's schedule than has been done for some years, or in other words, that we are not being able to keep pace to a greater extent with the work asked for than in previous years.

Whilst the number of surveys made is practically the same as last year they comprise long surveys of Main Highways to a large extent.

Below is appended a comparative summary of the work carried out by this Branch of the Service for the year 1927 and the first three months of 1928:

Surveys required and brought forward from 1926	602
Surveys asked for during 1927	161
Surveys made during 1927	208
Surveys carried over to 1928 Schedule	537
Surveys made without instructions (included in the above figures)	50
Miscellaneous examinations made during 1927	12
Survey requests cancelled during 1927	18
Plans submitted and examined on behalf of M.D.'s	510
Titles issued to roadways surveyed by M.D.'s	656
Plans prepared and filed in the Land Titles Office	335
Certificates of Title received for roadways	301
Certificates of Title received for "Public Reserves"	25
Certificates of Title to Public Buildings	26
Certificates of Title as to areas cut off by surveyed roads.....	2
Transfers issued covering lands no longer required.....	430
Number of plans of subdivisions approved during 1927.....	34
Plans submitted by Department of the Interior (Irrigation Dept.) as affecting crossings of road allowances and surveyed road- ways, and approved	7
Plans of Power and Transmission lines, approved	31

Leases of Road Allowances

Number of new applications to lease road allowances.....	101
Number of new applications granted	55
Number of Leases granted during the year (including free leases issued as compensation for surveyed roads)	305

BUILDING MAINTENANCE BRANCH

(D. E. McDONALD, *Superintendent of Buildings*)

CAPITAL EXPENDITURE

Provincial Mental Hospital, Ponoka:

A one-storied Dormitory building was erected to take care of the sleeping accommodation for fifty male patients. This building was so constructed that at a later date the same could be turned into a recreation hall. The construction was to conform with that of previous buildings at the institution, and of a fireproof type. The cost of same amounted to approximately \$23,500. Plans and specifications for the above were prepared in this office.

Six small modern cottages were erected at this institution to be occupied by various members of the staff. The construction of these buildings was of frame type at an approximate cost of \$2,200 each.

All the above work was performed by day labor under the supervision of our regular foreman at this institution.

Provincial Institute, Oliver:

An extension to the Power House was erected to take care of the installation of two new high pressure Babcock Wilcox boilers. This building is of concrete basement and brick construction, the approximate cost being \$22,000.

A five-roomed modern cottage, to be occupied by the cook of this institution, was erected at an approximate cost of \$2,800.

At the farm we erected a large hog-pen with the latest modern conveniences at the approximate cost of \$1,600.

This work was all performed by day labor, under the supervision of our regular foreman.

Plans were also prepared for a Nurses' Home and store-room, which we decided not to erect this year.

Central Alberta Sanatorium, Keith:

A seven-roomed residence with all modern conveniences was erected for the Assistant Superintendent of the Sanatorium at the cost of approximately \$8,000. The construction of this building was concrete basement, stucco finish and shingle roof.

A two-storied laundry building, equipped with the latest machinery, was erected to take care of the laundry work of this institution, the upper storey being fitted up as living accommodation for single members of the staff.

This work was performed by day labor under the supervision of our regular foreman, at an approximate cost of \$32,000 complete, including equipment.

Provincial Gaol, Lethbridge:

Three small frame cottages were erected, similar to those at the Provincial Mental Hospital, Ponoka, at an approximate cost of \$2,300 each. This work was performed by prison labor under the supervision of our regular foreman.

Land Titles Building, Calgary:

An addition to the Land Titles Building was erected to take care of the Ministers' office and Debt Adjustment Act offices. The construction corresponded to the previous building, and the contract was awarded to Messrs. MacDonald Bros., of Calgary, at an approximate cost of \$12,000.

Liquor Vendor's Store, Banff:

A new Liquor Vendor's store and living quarters was erected in the Town of Banff. This building consisted of two storeys erected to the style of architecture required by the Dominion Government; the first floor being for sales and storage of liquor, and the second floor consisting of five-room living quarters for the Vendor. The construction is of concrete basement, stucco finish and asbestos shingle roof. The contract for same was awarded to the Bennett & White Construction Co., of Calgary, at an approximate cost of \$12,000.

Agricultural School, Olds:

A new Dormitory and Class-room building was erected, the building consisting of basement and two floors, brick construction and asbestos roof, to take care of accommodation for about 200 students. Besides the dormitory, there are gymnasium, library, reading, dining and class-rooms and offices. The contract for this building was awarded to the Bennett & White Construction Co., the approximate cost being: building \$148,000, equipment \$26,000.

Police Building, Olds:

A new police building was erected at Olds, consisting of living quarters of five rooms and office for the constable in charge. The contract was awarded to Messrs. Kaiser & Hooper at an approximate cost of \$3,900.

Provincial Special Hospital for Infantile Paralysis:

At the latter part of the year it was decided, by the Executive Council, to erect a temporary hospital on the University grounds just west of the University Hospital, to take care of Infantile Paralysis patients. This work was carried on by day labor under our foreman, at the approximate cost of \$20,000, including hospital equipment.

Agricultural School, Raymond:

A sheep and hog barn was erected at an approximate cost of \$2,533. Contract for this building was awarded to Mr. S. T. Ellis, of Raymond.

Agricultural School, Claresholm:

A new pig barn was erected by Messrs. Miller and Lewis at the approximate cost of \$1,140.

Agricultural School, Vermilion:

Two stave-lock granaries were procured at an approximate cost of \$230, and erected at a cost of approximately \$45.

Police Buildings:

New police quarters were purchased at Athabasca, Oyen, McLennan and Castor. These buildings had to be thoroughly gone over and repairs made, in order to be suitable for police purposes.

Parliament Buildings:

There was also constructed, under the supervision of Mr. Thomas Draper, a test road in connection with paving of tar sands, at the rear of the Parliament Buildings. This work was done at the approximate cost of \$10,000.

Considerable new decoration to the walls of the building in connection with painting of the corridors was done during the year.

Maintenance:

This work consisted of a great deal of supervision, and was looked after very carefully. It also involved a great amount of office work.

The following is a list of offices and buildings under this Branch:

Parliament Buildings.
Government House.
Court Houses (12).
Land Titles Buildings (2).
Normal Schools (2).
Institute of Technology.
Agricultural Schools (6).
Office buildings and outside offices (17).
Police Buildings and detachments (114).
Gaols (2).
Asylums (3).
Sanitorium.

Expenditure controlled by this Branch of the Department, January 1st, 1927, to March 31st, 1928:

MAINTENANCE

Legislative and Departmental Buildings	\$372,738.00
Public Institutions	90,002.00
Government House	26,175.00
Power Houses	275,731.50
	<u>\$764,646.50</u>

CAPITAL

Furnishings, Legislative and Dept. Buildings	\$ 30,000.00
Furnishings, Public Institutions	49,000.00
Sites and Constructions, Public Buildings.....	268,700.00
Mental Hospital, Oliver	5,000.00
Provincial Mental Hospital, Ponoka	17,000.00
Provincial Gaol, Fort Saskatchewan	5,500.00
Institute of Technology, Calgary	4,275.00
Provincial Training School, Red Deer	4,700.00
Central Alberta Sanitorium, Keith	39,500.00
Provincial Police Buildings	25,000.00
Parliament Buildings	7,000.00
Provincial Gaol, Lethbridge	3,000.00
	<u>\$458,675.00</u>

POWER PLANTS

(VERNON PEARSON, *Superintendent*)

During the year there has been a very marked increase in the amount of electrical energy consumed in all our institutions, and the demands made on the power plants have exceeded those anticipated. From a heating standpoint the past year was abnormal. The long wet spring made heavy demands on our fuel supplies, and the extremely cold weather prevailing during the months of November and December provided a heating load that taxed the resources of several of the plants almost to their capacities, consequently the fuel expense, in some cases, exceeded the amount provided for that purpose.

For the past four years new equipment has been installed in various plants with a view to cutting down the fuel expense. Where this has been done the increased load carried has about offset the savings in fuel. In other words, the larger load has been carried without increase in expense, indicating an increase in efficiency in these plants. Where nothing has been done, as in the case of Ponoka Mental Hospital, the increase in load has produced a corresponding increase in the cost of operating the plant. This will continue as long as the old plant is kept in operation.

An outline of the work at the various institutions follows:

Fort Saskatchewan Gaol:

The second boiler in this plant was re-set during the summer and fitted up with furnace equipment capable of burning slack coal. This completes the work of remodelling started two years ago, and with this equipment working satisfactorily we can look for still further reductions in the cost of power and heat at this institution.

Oliver Mental Hospital:

There has been a steady increase in the demand for current at Oliver, but the new engines installed late in 1926 have produced the extra requirements at a lower cost than formerly, with the result that there has been a slight decrease in the fuel bill for the year.

During the fall the construction of a complete new boiler plant was commenced, comprising two 225 h.p. Babcock and Wilcox boilers, fitted with automatic stokers, also coal and ash handling equipment. The building is of brick, 45'x40' and 35 feet high. This plant is modern in every respect, and has been designed with a view to taking care of the future requirements of this institution. It is expected that this plant will go into operation about April 1st of this year.

Parliament Buildings, Power Plant:

The cost of operating this plant has probably reached the lowest possible limit. The output of light and power far exceeded that of any previous year. At the same time the cost was the lowest on record, it being \$18,903 as against \$36,000 a few years ago.

A small capital expenditure was made during the year in fitting up one more boiler with slack burning grates and forced draft. This plant will operate for some time before any further expenditures are necessary.

Ponoka Mental Hospital:

For several years past I have advocated the rebuilding of this plant. It is by far the largest we have, and very considerable economies in operation are possible. There has been a steady increase in the demands made upon it this year, and as nothing has been done to materially increase the efficiency, the cost of operation has gone up almost in direct proportion to the increase in load. While the bulk of the engine-room equipment is obsolete and inefficient, it has gone through the year without serious difficulty or breakdown, due mostly to the careful supervision it has received. The situation is, however, becoming more serious, and within a short time may become critical. Two years ago there was a sufficient margin in capacity to permit any of the machines being laid off for major repairs. Today this margin does not exist, consequently any breakdown would seriously affect the services to the institution.

In order to give some idea of the work performed by this plant the following figures for the year 1927 may be of interest:

Total steam generated: 118,000,000 lbs.

Total electric current generated: 1,032,000 kilowatt hours.

Total water pumped from deep wells: 52,000,000 gallons.

Total sewage treated at disposal plant: 51,000,000 gallons.

Total hot water supplied: 14,000,000 gallons.

This represents an average increase over 1926 of more than 10%, and it is obvious that, if this institution continues to increase, it will be difficult to supply it from a plant that at its best was only a patchwork job built from time to time to take care of the demands of the moment.

Institute of Technology, Calgary:

The requirements of this institution show a steady increase. The new workshops built in 1926 increased our load somewhat; this resulted in a slight increase in the fuel consumption. The power plant, as well as supplying all the requirements of the institution, is used for the purpose of training students in plant operation. No new equipment was installed during the year, but it is hoped that certain equipment may be added in the boiler-room this year that will have the effect of reducing the coal cost as well as provide further instruction to engineering students.

Central Alberta Sanatorium:

Of all the plants this one has made the best showing for 1927. A new engine was installed in the fall of 1926, costing \$7,000, the net result being a reduction in operating cost of \$3,500. In view of the extra demands made during the year due to severe weather, this result is all the more noteworthy. The cost of operation here is down to the minimum, and as a large laundry has been constructed and is about ready to go into operation, the cost of providing hot water, steam, power, etc., to this laundry will no doubt increase our appropriation for this institution.

Lethbridge Gaol:

This plant has had a straight year of operation without alterations or additions to equipment. The equipment installed in 1925 and 1926 is working out very well. The cost of operating the plant for 1927 was the lowest on record, being over \$1,000 less than 1926.

LICENSES ISSUED UNDER THE PUBLIC VEHICLES ACT, 1927(W. T. AIKEN, *Chief Clerk*)

Name of Operator.	Address.	Route.
H. Blinstin	Bellevue	Bellevue-Coleman.
Brewster Transport	Banff	Calgary-Banff.
Brewster Transport	Banff	Calgary-Waterton Lakes.
Brewster Transport	Banff	Calgary-Edmonton.
Drumheller Bus & Taxi Co. (Wm. H. Rounds)....	Drumheller	Nacmine-Rosedale.
R. J. Duncan	830 16th Avenue W., Calgary	Calgary-Hussar.
Foothill Transportation Company	704 15th Avenue W., Calgary	Calgary-Nanton.
Glacier Park Transport Company	c o A.B. Hogg, Esq., Yale Block, Lethbridge	Carway-Cardston-Waterton Park.
C. Hansen	c/o Messrs. Brownlee, Muir, Rankine & Hall, Calgary..	Calgary-Carbon.
A. A. Macdonald	c o Messrs. Bernard, Ber- nard & Goodall, Calgary..	Calgary-Milo.
W. Bruce-Marsden	720 20th Avenue N.W., Calgary	Calgary-Milo.

PROVINCIAL GAOL, FORT SASKATCHEWAN

(J. D. McLEAN, *Warden*)

Our daily average population for the year was 194.2, an increase of 5.3 over last year.

We had two deaths in the institution, also one execution and one case of suicide. There were no escapes this year.

Our building operations were confined to one piggery and one cement root-house. These, and the different repairs effected during the year, are shown in the detailed report of the Carpenter Foreman, herewith attached.

Our farming operations this year were most successful. We broke 45 acres on the South Farm, and this is all ready for sowing wheat in the spring. Our wheat yield was 15,725 bushels, making an average of 50 bushels to the acre; oats 9,234 bushels, an average of 82 bushels to the acre; and barley 2,839 bushels, an average of 48 $\frac{1}{4}$ bushels to the acre; making in all a total of 27,798 bushels.

We had about 120 tons of green feed, also 320 tons of corn and sunflower put in the silo. Our root crop was also very good, and we now have our root-houses full of potatoes, turnips, carrots, mangels, etc. We seeded 9 acres of barley on May 6th and had it cut, threshed, and feeding to the hogs by August 16th, thereby making it possible to get \$1,000 worth of hogs on an early market.

We laid out four acres in front of the Female Gaol as a park, installing a water system in such a way that all parts can be watered. This was sown in lawn grass, with roadways, having borders of lilac, honeysuckle, and different shrubs running through and flower beds set out in favourable positions. We also had a cement boulevard and sidewalk, with shrubbery and flower beds, laid out in front of the Male Gaol. All this has improved the look of the institution 100%. The entire inside of the Male Gaol has been repainted.

You will note that we have again reduced our annual cost per capita from \$181.02 in 1926, to \$160.82 this year.

We also increased our revenue from \$18,547.01 in 1926, to \$25,682.04 this year. This is most gratifying, as we have only received the first payment on our wheat: leaving a balance of about \$6,000 which, if we had received it this year, would have made our revenue \$31,682.04, and reduced our per capita cost to \$103.00.

MALE PRISONERS ADMITTED AND DISCHARGED, 1927

Month.	Admitted.		Discharged.	
	Comm.	Sent.	Comm.	Sent.
January	32	45	32	42
February	12	51	18	36
March	20	53	18	57
April	11	55	14	55
May	15	54	14	47
June	17	59	9	48
July	28	59	22	75
August	14	66	25	73
September	13	43	16	58
October	7	42	8	52
November	8	56	14	48
December	16	41	10	53
Total	<u>193</u>	<u>624</u>	<u>200</u>	<u>644</u>
			Comm.	Sent.
Prisoners in Gaol December 31, 1926			17	116
Prisoners admitted during year 1927			193	624
Total.....			<u>210</u>	<u>740</u>
Prisoners discharged during year 1927			200	644
Prisoners in Gaol December 31, 1927			10	96
Total number of prisoners in Gaol December 31, 1927			106	

DISCHARGES DURING THE YEAR 1927

Time expired	504
Released for Trial	160
Paroled	22
Paid Fine	13
Released on Bail	29
Deported	30
Transferred to Asylum	8
By order of the Attorney General	10
Transferred to A.P.P.	7
Released as Witness	17
Transferred to Penitentiary	11
Appeals	5
Released by order of Doctor Orr	11
Transferred to Hospital	4
Conviction Quashed	1
Died	2
Committed Suicide	1
Executed	1
Released by order of Immigration Dept.	8
Total.....	<u>844</u>

CIVIL STATE

Single	433
Married	157
Widower	34
Total.....	<u>624</u>

COUNTRY OF BIRTH

Canada	269	Denmark	5
United States	88	Roumania	1
England	50	Wales	1
Austria	70	Germany	5
Russia	11	Switzerland	6
Ireland	27	Finland	4
Scotland	28	Belgium	1
France	3	Gibraltar	1
Poland	9	Hawaii	1
Norway	27	Australia	1
Italy	3	British Guiana	1
Sweden	9		
China	1		
West Indies	2		
			<u>624</u>

HABITS

Temperate	508
Intemperate	78
Total Abstainer	38
Total	<u>624</u>

CONVICTIONS UNDER THE LIQUOR ACT

Alberta Liquor Act	210
Inland Revenue Act	21

FEMALE PRISONERS ADMITTED AND DISCHARGED, 1927

Month.	Admitted.		Discharged.	
	Comm.	Sent.	Comm.	Sent.
January	1	6	3	7
February	1	12	1	10
March	2	11	2	9
April	1	7	1	12
May	1	18	...	5
June	1	10	1	13
July	...	11	1	12
August	...	3	...	10
September	2	10	1	12
October	...	6	1	8
November	2	9	1	6
December	1	4	1	11
Total	<u>12</u>	<u>107</u>	<u>13</u>	<u>115</u>

	Comm. Sent.	
Prisoners in Gaol December 31, 1926	3	19
Prisoners admitted during year 1927	12	107
Total	15	126
Prisoners discharged during year 1927	13	115
Prisoners in Gaol December 31, 1927	2	11
Total number of Prisoners in Gaol December 31, 1927	13	

FEMALE DISCHARGES DURING THE YEAR 1927

Term expired	86
Released by order of Doctor Orr	7
Paid Fine	4
Released for Trial	12
Transferred to Asylum	1
Deported	3
Transferred to Hospital	1
Released on Bail	4
Released by Attorney General's Department	2
Paroled	2
Out as Witness	3
Sentence Quashed	1
Sentence Suspended	1
Transferred to A.P.P.	1
Total.....	128

MALE REMISSION REPORT FOR THE YEAR ENDING DEC. 31, 1927

Number of prisoners having received full remission.....	477
Number of prisoners having received part remission.....	26
Number of prisoners having lost full remission	1
Number of prisoners receiving Confederation remission.....	70

PROVINCIAL GAOL, LETHBRIDGE(W. G. EDGENTON, *Warden*)**NUMBER OF PRISONERS ADMITTED AND DISCHARGED
DURING 1927**

Month.	Daily Average.	Admitted.			Discharged.		
		Sent.	Com.	Rem.	Sent.	Com.	Rem.
January	141.09	84	11	....	64	6	....
February	143.21	60	6	....	58	4	....
March	131.06	57	2	....	90	7	....
April	106.96	68	3	....	80	4	....
May	96.45	64	2	....	66	1	....
June	105.53	80	7	....	94	3	....
July	90.90	65	3	6	64	2	6
August	87.74	51	1	2	65	3	2
September	62.96	21	3	1	35	5	1
October	72.48	62	6	3	43	4	3
November	109.40	104	7	4	51	5	3
December	146.93	98	4	2	110	1	1
Average for year	107.89	814	55	18	820	45	16

Total number of prisoners admitted during 1927..... 887

Total number of prisoners discharged in 1927..... 881

	Sent.	Com.	Rem.
Prisoners in Gaol December 31, 1926	122	....	....
Prisoners admitted during 1927	814	55	18
	936	55	18
Prisoners discharged during 1927	820	45	16
Prisoners in Gaol December 31, 1927	116	10	2
Total.....	128		

Served previous sentence at Provincial Gaol 240

Number of days remission earned during year..... 2,423

Number of prisoners participating 487

Average remission earned per man 4.97 days

NATIONALITIES**BRITISH**

Canadian	441	India	2
Scotch	96	Australian	1
English	75	South African	1
Irish	37	Straits Settlements	3
Welsh	3		— 659

FOREIGN

United States	88	Holland	3
Austria	23	Switzerland	3
Russia	22	Hungary	3
Denmark	11	Belgium	1
Norway	10	France	1
Roumania	10	Brazil	1
Sweden	9	Greece	1
Finland	9	Syria	1
Poland	8	Turkey	1
Germany	7		— 228
China	6		
Italy	6		
Czecho-Slovakia	4		887

EDUCATION

Can read and write English	853
Cannot read nor write English	34
	887

SENTENCES

Under thirty days	150
Under two months	464
Two to three months	87
Three to four months	50
Four to five months	15
Six to nine months	37
One year	12
One year to eighteen months	11
Two years less one day	2
Sent to P. A. Penitentiary	3
Committed	36
Remanded	15
To be held under V.D. Act	5
	887

DISCHARGES

Expiration of Sentence	719
To Court	33
Deported	27
Paroled	16
Released on Bail or Bond	14
To Hospital	14
Committed to Sentenced	10
Fine and Costs paid	11
Transferred to Ponoka	9
Order of Governor-General	6
Doctor Shillington's orders	5
Remanded to Sentenced	5
Transferred to P. A. Penitentiary	4
Order of Minister of Justice	2
Order of Immigration Department	2
Handed to City Police	1
Remanded man transferred to Hospital	1
Conviction Quashed	1
Order of Court	1
	881

AGE OF PRISONERS

Under 20 years	78	Over 60 and up to 70 years....	28
Over 20 and up to 30 years....	303	Over 70 years	8
Over 30 and up to 40 years....	255	No particulars	2
Over 40 and up to 50 years....	158		
Over 50 and up to 60 years....	55		
			887

CIVIL STATE

Single	675
Married	163
Widowed	33
Separated	8
Divorced	8
	887

HABITS

Total Abstainers	49
Temperate	412
Intemperate	426
	887

SOURCES OF REVENUE FOR THE YEAR ENDING DEC. 31, 1927

Sales, as per Receipt Book:

Empty Containers	\$ 4.50
Supplies	1,252.63
Potatoes	3,439.90
Ice	222.61
Alfalfa Meal	355.40
Hides	144.65
Water	658.57
Poultry	29.20
Vegetables	471.86
Switching C.P.R. Spur Track	6.00
Electric Light	651.42
Scrap Iron	25.45
Cattle	3,499.17
Hogs	2,832.06
Wheat	7,210.61
Sugar Beets	348.54
Hay	817.66
Pasture	116.95
Interest, Alta. Wheat Producers	3.83

\$22,091.01

By Inter-Departmental Vouchers:

Engineers' Rentals	945.83
--------------------------	--------

Total Revenue for 1927 \$23,036.84

Accounts Receivable:

Experimental Farm	\$ 698.24
Experimental Farm	137.24
Experimental Farm	192.61
Lethbridge Mercantile	137.11
C. R. Daniel	82.84
S. Alta. Co-op. Association	6.89
S. Alta. Co-op. Association Shares	360.00
C. Gould	11.85
Claude McNeille	22.47
T. F. Smith	6.40
J. Mackin	9.04
Dr. R. N. W. Shillington	9.50
W. Blyth	21.48
H. E. Smith	13.00
W. Roberts	20.50
T. S. Woolley	1.26
J. Stark	.78
D. O. Williams	3.49
E. A. Pettifor	7.06
J. K. Holmes	.39
F. Young	5.83
Geo. Sneddon	3.62

1,751.60

\$24,788.44

PER CAPITA COST, PROVINCIAL GAOL, LETHBRIDGE, FROM JANUARY 1st, 1927, TO MARCH 31st, 1928.
AVERAGE DAILY POPULATION 114.11 (456 DAYS)

Classification	Stock on hand Dec. 31, 1926	Expenditures	Farm Pro- ducts used	Total	A.P.P. and Capital Ex- penditure	Less Stock on hand March 31, 1928	Net Cost
Salaries .....	.....	\$22,648.23	.....	\$22,648.23	.....	.....	\$22,648.23
Groceries, etc. ....	.....	2,998.85	.....	3,328.76	.....	\$ 867.18	2,461.58
Flour and Oatmeal	\$ 603.00	1,920.93	.....	2,523.93	.....	122.76	2,401.17
Laundry and Cleaning	137.47	1,530.30	.....	1,467.77	.....	635.94	831.83
Office, Stationery	256.91	549.14	.....	806.05	.....	317.02	489.03
Clothing, dry goods	4,548.92	3,593.57	.....	8,142.49	.....	5,201.39	2,941.10
Medical Supplies	118.00	423.16	.....	541.16	.....	118.00	423.16
Hospital Fees, etc. ....	.....	2,374.57	.....	2,374.57	.....	.....	2,374.57
Physician .....	.....	2,375.00	.....	2,375.00	.....	.....	2,375.00
Automobile	1,251.00	1,685.86	.....	2,936.86	.....	1,835.65	1,101.21
Farm and Garden	27,969.76	11,701.30	.....	44,926.35	.....	19,536.16	25,390.19
Religious Services .....	.....	300.00	\$ 5,255.29	300.00	.....	.....	300.00
Transportation .....	.....	3,699.75	.....	3,699.75	.....	.....	3,699.75
Alberta Provincial .....	.....	939.45	.....	939.45	\$ 939.45	.....	.....
Equipment	2,483.26	1,381.88	.....	3,865.14	.....	3,790.03	75.11
Miscellaneous:	.....	.....	.....	.....	.....	.....	.....
Tobacco .....	.....	96.78	.....	96.78	.....	.....	96.78
Freight .....	.....	205.52	.....	205.52	.....	.....	205.52
Contingent Fund .....	.....	57.79	.....	57.79	.....	.....	57.79
Travelling expenses .....	.....	69.33	.....	69.33	.....	.....	69.33
Repairs to clock .....	.....	4.00	.....	4.00	.....	.....	4.00
Funeral .....	.....	35.00	.....	35.00	.....	.....	35.00
Visiting Committee .....	.....	109.48	.....	109.48	.....	.....	109.48
	\$37,698.23	\$58,499.89	\$ 5,255.29	\$101,453.41	\$ 939.45	\$32,424.13	\$68,089.83
POWER PLANT—							
Salaries .....	.....	\$ 9,255.00	.....	\$ 9,255.00	.....	.....	\$ 9,255.00
City Water .....	.....	787.54	.....	787.54	.....	.....	787.54
Steam coal	\$ 846.45	1,194.17	.....	2,040.62	.....	\$ 886.60	1,154.02
Domestic coal .....	.....	1,119.27	.....	1,119.27	.....	27.50	1,091.77
Freight .....	.....	1,050.79	.....	1,050.79	.....	.....	1,050.79
Repairs machinery .....	.....	793.20	.....	793.20	.....	.....	793.20

DEPARTMENT OF PUBLIC WORKS

PROVINCIAL GAOL, LETHBRIDGE—Continued

Classification	Stock on hand Dec. 31, 1926	Expenditures	Farm Pro- ducts used	Total	A.P.P. and Capital Ex- penditure	Less Stock on hand March 31, 1928	Net Cost
Power plant supplies	\$ 946.46	\$ 709.82	.....	\$ 1,656.28	.....	\$ 886.20	\$ 770.08
Boiler inspection .....	.....	25.00	.....	25.00	.....	.....	25.00
Crating furniture .....	.....	10.60	.....	10.60	.....	.....	10.60
Contingent fund .....	.....	20.83	.....	20.83	.....	.....	20.83
MAINTENANCE—							
Repairs to buildings	\$ 280.55	\$ 464.72	.....	\$ 745.27	.....	\$ 162.44	\$ 582.83
Telephone rentals .....	.....	750.25	.....	750.25	.....	.....	750.25
C.P.R. spur track .....	.....	129.46	.....	129.46	.....	.....	129.46
Repairs laundry .....	.....	79.90	.....	79.90	.....	56.70	23.20
Electric repairs .....	.....	115.31	.....	115.31	.....	.....	115.31
Furniture .....	.....	196.00	.....	196.00	\$ 196.00	.....	.....
New houses .....	.....	3,925.03	.....	3,925.03	3,925.03	.....	.....
	\$39,771.69	\$79,126.78	\$ 5,255.29	\$124,153.76	\$ 5,060.48	\$34,443.57	\$84,649.71
(a) \$ 39,771.69	Cost of Maintenance of prisoners					(d) \$ 5,060.48	
(b) 79,126.78	at Blairmore, Calgary and Drum-					(e) 34,443.57	
(c) 5,255.29	heller for above period	\$939.45				(f) 84,649.71	
	<u>\$124,153.76</u>						<u>\$124,153.76</u>
Net cost as shown above							
Less Farm Products							
Less Revenue							
Less Accounts Receivable							
Net Cost							
Net cost per capita for period							
Net cost per capita per diem							